THE RARS -EXCITER-

RALEIGH AMATEUR RADIO SOCIETY
RARS
WORLDWIDE FRIENDSHIP

CLUB CALL: W4DW

REPEATER: W4DW/R 146.04/64

AUGUST 1984

ISSUE 173

LEADING EDGE

SHERMAN STARNES
W4TZU

A direct quote from Amateur Satellite Report, Number 79, dated June 11, 1984, describes yet another significant event in amateur radio communications made possible by OSCAR 10.

"An important milestone was reached May 28th when amateurs in West Virginia and California apparently became the first ever to QSO using handheld transceivers (HT) through an amateur radio satellite. KB6DDQ in Los Angeles and KD8GL in Wheeling, WV, each using only a 2-m FM HT first established contact at 1458 UTC. The historic event was facilitated by so-called "gateway" stations which served to connect local terrestrial repeater systems to the high-flying AMSAT-OSCAR 10 (AO-10) satellite. Although in the past, cw QSOs have been reported where one of the stations keyed the transmit switch of his HT for a crude key, it is believed the May 28th QSO comprised the first occasion on which both QSO participants used HTs.

"In West Virginia, KD8GL used his 2-m HT to talk through the Triple States Radio Amateur Club repeater, KD8GL/R. Signals from the repeater were picked up by the local gateway station WB8ZTV which converted them from FM to SSB while converting them to the 436 MHz OSCAR 10 uplink frequency. Signals were then beamed by WB8ZTV to OSCAR 10 positioned high over the Western Hemisphere.

"Meanwhile in L.A., gateway station N6JFD tuned to the AO-10 downlink and converted the SSB back to FM and forwarded the signals to the WA6OBT repeater to which KD6DDQ was tuned. The reverse path to Wheeling was the mirror image of this path. Both repeaters and gateway stations operated full duplex and the QSOs were two-way. Signals in both directions were excellent according to monitors.

"Later, the W7LWE repeater/gateway in Lake Havasu City, AZ joined in the fun. This made it the first three-way gateway operation and effectively linked amateurs in three states using OSCAR 10's trunking capabilities."

For detailed information on gateway stations and operation, send an SASE to AMSAT, P.O. Box 27, Washington, D.C., 20044.

Local amateurs known to be active on AO-10 are W4GKC, Robbie, and SM0BRU/W4, Robert. W4TZU suffered a 15 degree bend in the tower in an early May windstorm and has not yet recovered. When the station is recommissioned it will be equipped with the low-loss Belden 9913 coax in the downlink so something good is coming of it.

Conditions aboard UOSAT-OSCAR-11 continue to improve. The failure of the two-meter telemetry to return to operation

(continued inside)

LEADING EDGE

(continued)

after a programmed shutdown on the third orbit has been traced to a group of less than a half dozen components. It was through multiple redundancy that University of Surrey amateurs were able to recapture UO-11 and guide it back to a healthy status.

On board UO-11 is something called the "Digital Communications Experiment" or DCE. This device has two serial data ports which can transmit and receive via the spacecraft r.f. systems. Using this capability, AMSAT will study various packet radio protocols in preparation for PACSAT, the packet radio satellite under development in cooperation with Volunteers in Technical Assistance, (VITA).

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COMING ATTRACTIONS!

The Motorola R2001 Communications System Analyzer

2001? You may recall that as the futuristic sounding title of a movies of some few years ago. I'd guess Motorola had that same 'futuristic' thought in mind when they assigned that number to this neat little pachage.

Jeff, WA1WXL, will have a short talk and a "check-it-out" demo at the August meeting. "Check-it-out" means bring your rig! Power out, deviation and frequency are for starters. The multiple self-contained generators, TT, PL, AF and RF; O'scope, and total automated computer interfacing are just a few of the bells and whistles this thing has. How about a completely self-contained spectrum analyzer continuously tuneable from 1MHz to 1gHz?

At this writing we're sure we'll have plenty of adapters available for the RF connections but it doesn't seem likely we could come with enough combinations to meet all power supply connectors, so bring your own supply.

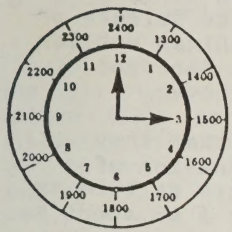
BULLETIN

A committee met on Monday, July 16, concerning revision of the current RARS By-laws. A number of initial proposals were listed. Future meetings will take place to discuss and consider these and other changes. Input and assistance from the membership is invited and encouraged. Read the By-laws! If you don't have a copy, ask for one at the next meeting. If you have a beef--if you have a suggestion--talk to Marty, NY4H. If you would like to attend a committee meeting, let Marty know. Final proposals will be published in the EXCITER prior to being voted upon at a regular RARS meeting. If there are changes you"d like to see in RARS, now is your chance to do something about it!

We've already received some corrections/changes in the Roster. Some are "boo-boos." Some are valid changes--and we also have a couple of additions. Please check it over and advise the EXCITER of other changes that need to be made. We'll print a revision in a couple of months.

FOR SALE: Dentron MLA-2500 Amplifier 160-10 Meters--2KW PEP--$500.00.

Contact Ron Oates, AA4VK--847-3279



MINUTES OF THE MEETING

The regular monthly meeting of the Raleigh Amateur Radio Society was held on July 4, 1984, at the First Presbyterian Church, S. Salisbury Street. President Bruce Eggers, WA9NEW, called the meeting to order and welcomed the members and guests. The roster was signed by 20 people.

Bruce gave a report on the June Advisory Board meeting. A discussion was held about confusion pertaining to new members and the application form we now use. A clarification of this will be added to the By-Laws, when revised, and a provision added for possible refusal to a prospective member for membership in the club.

Bruce is working on the application to ARRL to qualify RARS as a service club. Anyone having input for this, letters pertaining to our assistance in public service, newspaper articles etc., please contact Bruce.

ARRL maintains a listing of services and information for the handicapped. Anyone knowing a handicapped person who is interested in becoming an amateur, get in touch with Bruce about this information.

Chuck Littlewood, K4HF, quoted from the Western Carolina ARS newsletter pertaining to the volunteer examinations that were given at the Atlanta Hamfest.

Audrey Browne, WB4ZSM, received a note from the South Hills Mall Merchants Association thanking us for our participation June 16th with our RARS booth. Audrey also recently attended a seminar sponsored by WPTF and WQDR pertaining to getting on-the-air publicity for non-profit organizations.

The financial review committee plans to meet with the Treasurer prior to the next Advisory Board meeting. The Treasurer will then make his report to the Advisory Board and to the club members in August.

The Constitution and By-Laws committee plans to meet this month. Anyone still interested in serving on this committee contact Marty Silver. Any input will be more than welcome.

Matt Stokes, WB4YQA, EC, brought the new call up list and explained how it works. All should check the list to be sure their names and phone numbers are correct.

Bruce announced that Reed Whitten, AB4W is working with the Public Safety and Crime Control group for space in their booth for amateur radio at the State Fair in October. It is hoped many hams can be utilized from our area to help with this project.

Bruce presented the annual budget to the members for discussion and comment. A motion was made, seconded and passed to accept the budget for 1984-85.

Ann Bradley, WA4APK, asked members to help our 3 blind members to attend club meetings. Also, Ward Atherton, W4RVE, is recording the RARS Exciter for these members and Jim Bradley, WA4AOO, is making the tapes.

Bruce referred to an article in the July newsletter about the possibility of Saturday morning breakfast get-togethers of members. Anyone with suggestions or interest in this idea, contact Bruce.

The RARS Exciter was selected by 73 Magazine as newsletter of the month. A round of applause was heard for Ann Bradley and all who help make our newsletter successful.

Chuck announced that the Charlotte Hamfest probably will be held April 13-14 which means we will have to find a new date for ours. A committee is working on this as well as a new site for it.

After coffee, doughnuts and good fellowship, the meeting was adjourned.

Marty Silver, NY4H
Secretary, RARS

'NEW' LINE

by Bruce Eggers, WA9NEW
President, RARS

DEREGULATION IS UPON US!
"Woe is Us", or "Hallelujah"?

It's really not an issue between the political parties. Both Democratic and Republican administrations have furthered the cause in recent years. Airlines, natural gas, banking, - The list continues to grow. Of interest to Amateurs are the effects of deregulation on telecommunications.

Broadcast stations are no longer required to report public service programming and the time limitations on commercials have been lifted. Individuals employed in the field will no longer be examined and licensed by the government. In each case the government is willing to rely upon the competitive marketplace and the ability of each industry to self-regulate in its own long-term best interest.

This trend is probably not all good, but it certainly isn't all bad either. Most industries do self-regulate under the watchful eyes of various govenment agencies and/or consumer interest groups. And now deregulation is coming to Amateur Radio! No more FCC exams! Heavens! Will we survive?

You darn well tootin' we will. And prosper. Deregulation isn't anything new. Compare reporting and logging requirements of today with what we lived with 15 or 20 years ago. Do you remember what it took to legally put the rig in the car and head out on a cross-country drive? I remember all those letters to each and every District office. (And my XYL remembers the logging!) So what about local testing by Amateurs? If I hadn't have been able to qualify for a Conditional class license under the more liberal rules of 20 years ago, I simply could not have gotten on the air nearly as early as I did and may not have ever!

So now the same opportunity is on the horizon for others. Well, my copy of the new VE manual awaits my attention. Let me get on with it and let US get on it!

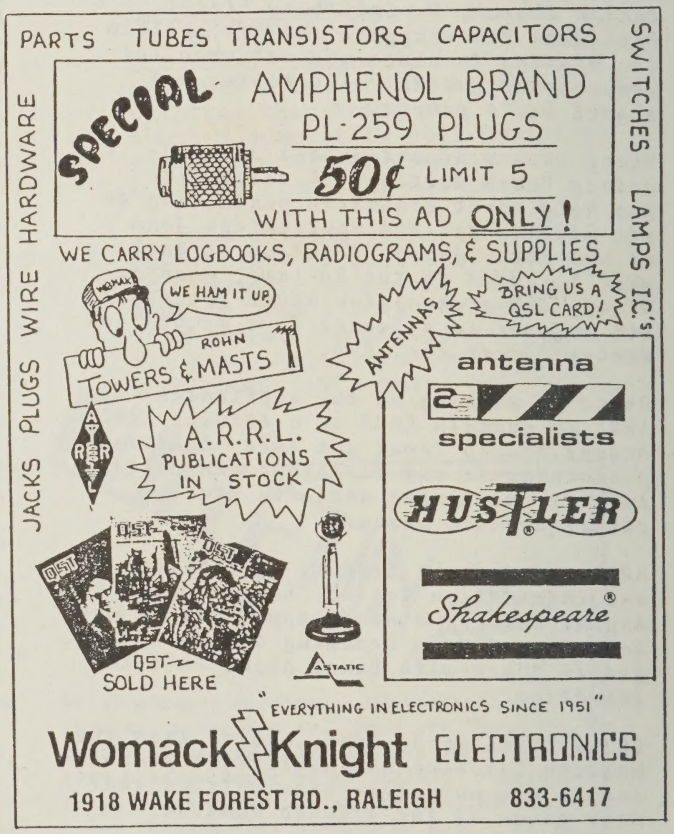
'DESTINATE' WINS

Each year, the Unicorn Hunters of the Lake Superior State College of Sault Ste. Marie, Michigan publish a list of words to be banished from the English language.

I am happy to report that they have accepted my nomination of DESTINATE, as in: This will be my final transmission as I am about to destinate.

The Unicorn Hunters awarded destinate with a dishonorable mention.

JOHN CORCORAN KA6MFH (from World Radio)



ARRL NOTES

FROM ARRL LETTER

¶ Amateur Radio will be represented at the 1984 Olympic Games in Los Angeles by Amateur Radio Station NG840 (the Olympic Village Station Project Team), located at the University of California at Los Angeles (UCLA) Olympic Village in Westwood. The station's primary purpose is to send messages home for Olympic participants from countries which permit third-party-traffic with the United States. Many of these messages will be for destinations within the U.S. and Canada; for these, we plan to use the National Traffic System (NTS) as the primary vehicle for handling such messages.

Standard Olympic Games Numbered Message Texts

ONE. This message is being sent as a free public service by Amateur Radio operators here at the Olympic Village.

TWO. I arrived safely and am having a wonderful time here at the Olympics. I look forward to telling you all about it when I return.

THREE. Please give my best wishes to _____.

FOUR. I miss you and look forward to being with you again soon.

FIVE. I received your _____. It is appreciated; many thanks.

SIX. I look forward to the upcoming competition and will give it my best.

SEVEN. I hope news of my success has reached you. Thank you for all the support that made it possible.

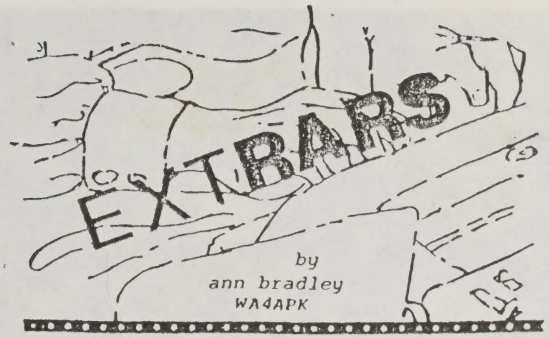
EIGHT. Although the results were disappointing, I am still glad to have had a part in the competition.

NINE. I had a slight injury, but don't worry. I am fine and will be home as planned.

TEN. I plan to stay on after the Games to do some sightseeing. I will contact you later regarding my new return trip arrangements.

¶ Here is a list of countries with temporary third-party-traffic agreements with the U.S. for use during the 1984 Summer Olympics. The agreements will be in effect between 0001 UTC July 1 and 2359 UTC August 31, 1984, and will allow messages to be exchanged between the Olympic Village and the athletes' home countries:

Hong Kong (VS6)
Indonesia (YB, YC, YD)
Romania (YO)
Zimbabwe (Z2)



Cary Swapfest was its usual barrel of fun. Weather was delightful! It was much cooler than normal. One small shower --but someone in the Cary bunch must have paid the preacher 'cause the downpour waited until just after the prize drawing. In my book, that's the greatest event of the summer--just sittin' back at the "yaller trailer" chatting with all the old friends who come by.

****

Jack Brookshire, N4-Hot Biscuit Grabber-now has a new call--KI4NZ. It's a nice call, I think. Jack's last address was in Lenoir, NC. Hurry back to RARS, Jack--we miss you!!

****

Congratulations to RARS member, Chris Newcomer, WD4DII--winner of the Icom HT at the Cary Swapfest. See there, Cris, you shouldn't have left so soon!

****

Thanks to Chairman Tom Swanson and all the guys who participated in Field Day. And especially thanks to Tom for the Field Day photos in this months newsletter. It was a less than desirable day for the operators. For Tom and Rollin and Ken it was a long wet night. The good news for Rollin, NF4P, was a Field Day Contact with NF7P! Bad news is NF7P cannot be found in the call book.

****

Marty, NY4H has been re-elected Vice President of YLRL for another term. Congratulations, Marty--You're a credit to our fair sex!

****

Cary ARC had its best year yet in Field Day Competition---Six stations not to mention a computer for duping. Scores are not yet in, but unofficially it looks like something over 3900 contacts. You got to admire a bunch like that!!

R-T-T-Y M-A-I-L-B-B-O-X

Welcome to the world of the RTTY Mailbox!!

Some of you might not be aware that there is a 2 Meter mailbox operating up and running in Raleigh now! It is operating on 147.54 mhz simplex and runs at 100 wpm Bardot. To bring the Mailbox up is easy. All you have to do is send a (C/R) .K4BWCMB (C/R). Don't forget the period (.) After the Mailbox responds, you can get help by sending a (C/R) MBXHELP (C/R). This will send you a list of commands on how to use the Mailbox system.

The Mailbox is located in Northeast Raleigh. It is running about 80 Watts to a 14 element beam at 90 feet. The beam is directed back over Raleigh to give the best coverage to the Triangle area. There are several Hams using HTs and getting into the Mailbox very well.

Give it a try! You might have a lot of fun and meet some of your friends on there too.

Best 73!!

de Bill, K-4-B-W-C SYSOP

DANE MARKS 1ST HAM RADIO TRANSMISSION-----

Copenhagen, Denmark (AP) - Civil engineer Elnar Dessau yesterday celebrated his experimental shortwave radio broadcast 75 years ago believed to be the first by a "ham" operator.

****

Assisted by schoolmate John Nyrop, the then 16 year-ole Dessau chatted for nearly two hours on March 18, 1909, through his basement transmitter north of Copenhagen to an official at a government radio communications station about six miles away.

It is considered to be the first two-way transmission by a radio hobbyist. The first patent for "wireless" communication was received by Italian Guglielmo Marconi in 1896, and the first advertised broadcast was on Dec. 24, 1906, by Canadian-born Reginald Aubreyu Fessenden.

The Association of Danish Experimental Radio Amateurs marked the anniversary with a special award to Dessau, 91, who still lives in the Danish capital.

His career as an industrialist took him to the United States, then back to Denmark where he served for 44 years on the board of directors of Denmark's United Breweries, producers of Tuborg amd Carlsberg beers.

THEY'LL DO IT EVERY TIME -:- -:- -:- by Hatlo

BERT'S BEAT

WITH
BERT BAILEY, W4FMN

****

RUN FOR THE OAKS OR FIELD DAY?????

Well, this called for a decision. Ole Reliable, Bill the WB4CCB, opted for the-----Run! Ole Bert, the runner yet, opted for------Field Day. So we have a dichotomy. Bill has become the Major Domo of Radio Support of the North Carolina Roadrunners Club. The only way W4FMN can catch up is to carry a handitalkie on his runs. Now that is a chore, at least if you are a sexagenarian. (That refers to AGE, men). Anyway, to make a bit of sense out of this column, let it be noted that Bill, his old sidekick Charles WA4CLT (who else?) and one other (not Jack, --surprise) took charge of radio support at the Run for the Oaks, a 5K run in the vicinity of Brentwood and turned in their typically superior performance. They don't even bother to congratulate us any more. We are just too good. The Runners' Club has been convinced of the expertise of the RARS. So what more can anyone say?

As for W4FMN, he ran------Field Day at the Wake Tech ARC. This was a marathon, with but one op and eager but inexperienced students. Twenty students turned out as is usual for each of these affairs. Two volunteered to man the generator, which ran beautifully and was well attended by the students. Ereeting dipoles, bringing coax to the correct switches, terminating with UHF connectors as well as other types, and just plain wrestling with these kinky beasts were some of the chores new to but performed well by students who will some day annex call signs after their handles. Their enthusiasm and thirst for knowledge make the annual chore perhaps worthwhile. If not this, W4FMN would be----running For the Oaks.

MATHEMATICS AND ELECTRONICS////////

Many young men and women are latching onto careers in electronics these days and that is good. But the expertise of some in the simpler aspects of math is not good. And this is bad. The best advice that can be given to the youngster who aspires in high school--or earlier-- is to shine in math. Math must be fun and it must be mastered to succeed in electronics. If you are at the top of the class, you'll be a good engineer. If you are not at the top but still a good student you will be a good technician. Take your pick--- the earlier the age, the better. If one is interested in the "Why", go to State. If interested in "How" go to Wake Tech. In any case, get with the math. It is discouraging to see students struggling with electronics because they cannot solve a simultaneous equation or are not sure what $\sqrt{x} + \sqrt{y}$ equals. It does not, for instance, equal $\sqrt{x + y}$. Educators may not admit same, but math is a dying subject today. That is why the USSR is producing 4 times as many engineers as the US. Wayne Green, of NSD fame, constantly harangues about the scarcity of new hams--this is true. But the basic problem is not the lack of knowledge of electronics or electricity, it is the lack of simple expertise in basic MATH. To get a budding ham on the right track, we must get kids interested in math. Never doubt for a minute that the so-called schoolwise illiterate, e.g. Thomas A Edison, Faraday, etc, understood basic math better than most of their contemporaries who were schoolwise. Math is not necessarily a rigid course in many curricula. It is a subject that, at bottom, developes the mind so that it can reason to a logical conclusion. Without this trait, not many hams can troubleshoot their own equipment. And so on. So, in our own brief courses designed to help budding hams obtain their tickets, we must insure that the future WZ4QRZ can add, subtract, multiply and divide. Maybe he keeps getting the wrong anser for resistors in parallel not because he does not understand what he has been told but because he cannot handle simple addition and multiplication. As an aside, a gud grounding in Englisch wud be moste helpfel also, too. QRT QRZ. 73 W4FMN

A LOVE LETTER TO A 65 YEAR OLD
HUSBAND-----JUST RETIRED

My Beloved George, I welcome you home with pride and with pleasure. There may have been pleasure in it 30 years ago, but there would never have been more pride. And I welcome you with a re-assertion of the vow I made to you 43 years ago. I still take you for better or worse. My pride lies in the fact that you have made it to retirement. This is a great achievement, you know, as many are not so fortunate.

Since you first went to work, you have manoeuvred your way past some formidable dangers--a couple of wars, cancer, heart attack, automobile accidents, mental breakdowns, and lightening. A man who has survived the perils of the last 50 years is a hero by just staying alive.

I'll want you to have a nap every afternoon because it will be good for you and because you deserve the luxuary. I'll want you to sit up on week nights to your heart's content and see all the late movies you want. I'll want you to go to the doctor every six months for a check-up. I'll want you to come and go as you wish, fish, hunt or play with your pals as long as you want. I'd like you to think about enlarging your shack and would like you to spend untold happy hours rag-chewing with your cronies. I want you to take $400 out of savings and buy yourself some casual clothes for this great new adventure of your life.

Now for your instructions----Stay out of my kitchen!-----Prepare a chart showing which of the household chores you intend to take over----Start by cleaning up your ashtray and any other mess you make during the day. I'll still take care of your evening and weekend messes, except in the shack---Prepare to give me two afternoons a week to be with my friends---Have your eyes checked, then subscribe to a second newspaper, because we are going to have a lot of time on our hands, and news-reading will help to fill it---set up in the bank, in your investments or somewhere, an adequate sum of money in my name so I can get it in a hurry if I have an emergency to face alone---Then go and make a will---that is if you want your meals on time! Be informed that when "retirement let-down hits you in about a month, you will have ten days - no more - to feel sorry for yourself. After which you'll have to smarten up and get on with your new life.

I'm so glad, my dear, that you have come home in retirement. As soon as we have become acquainted with each other, we are going to have a splendid time! Your loving and devoted wife, Jean (XYL VK2GT)

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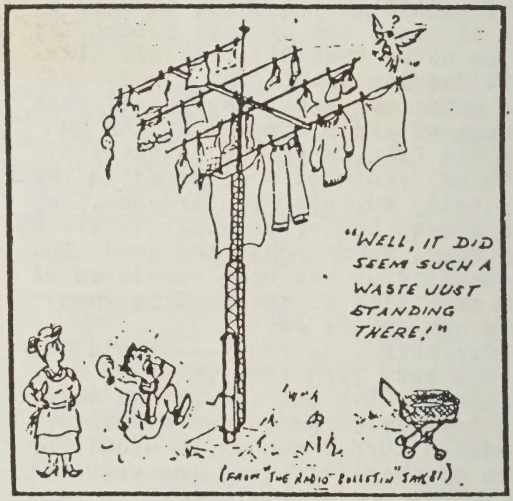
LAST MINUTE BARGAIN: "Hamfest Hauler" Trailer, 40 x 48 with canvass top, $225. Call J. Bradley, KA4YLE, Phone: 639 - 6240.



From Amateur Radio Wireless

ATTENTION ADVERTISERS

Raleigh Amateur Radio Society is now accepting advertising for the RARS Newsletter! Your ad can reach the active hams of the Raleigh area, delivered directly to their homes monthly, at amazingly low cost. Present your products and services to the leading purchasers of electronics and computers. Your camera-ready ad can run in the next issue! Special rates for business cards and Hamfest vendors. Make your ad dollars go further. Advertise in the RARS Newsletter!

Advertisement Size	12 Issues	6 Issues	3 Issues	One Time
Two page Spread (12"x7 1/2")	$400.00	$220.00	$120.00	$40.00
Full Page (6"x 7 1/2")	250.00	140.00	75.00	25.00
One-half Page (6" x 3 3/4")	175.00	95.00	52.00	17.50
One-quarter Page (3" x 3 3/4")	100.00	60.00	30.00	10.00
Business Cards (2" x 3 1/2")	25.00 (Yearly Basis Only)			

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Minimum term of advertisement is three (3) months in order to qualify for the above rates. Ads should be furnished as "Camera ready copy." Material furnished on 8½ x 11 page size or fraction therof will be reduced 25% to fit newsletter page size of 7 x 8½. Advertisers will be sent a complementary copy of each issue of the newsletter in which his ad appears.

Payment for advertisement must be made at time of ad placement.

One time rates apply to runs of one or two months only for time dependent items such as one-time sales and annual events.

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RARS meets each first Wednesday at 7:30 at First Presbyterian Church, 116 S. Salisbury Street

Calendar

Aug. 1 - Regular RARS Meeting

Aug. 4,5 - 160M SSB Contest

Aug. 6 - W1AW Code Qualifying Run

Aug. 11, 12 - European DX Contest-CW

Augl 15 - RARS Advisory Board Meeting
NCSU Faculty Clyb, 7:30pm
All Welcome!!

Aug. 18 - Alaska QSO Party

Aug. 29 - Newsletter Mailing Party

Sep. 1, 2 - Shelby NC Hamfest

Sept. 18 - Application deadline for FCC Amateur Exams.
Greensboro, NC.
October 2, 1984